Brown or buffy brown throughout above, buffy whitish below, the tips of the belly-hairs a clearer buffy than in *umbrosus*. Hands and feet more or less cinnamon-brown, only becoming blackish on the digits. Tail dull brownish, commonly darkening to black at tip.

Zululand (Dahl, and Rudd Exploration). Natal, fide

W. L. Sclater and others.

Readily distinguishable by its general brownish colour.

IV.—New Heterocera from Dutch New Gninea. By J. J. Joicey, F.L.S., F.Z.S., F.E.S., and G. Talbot, F.E.S.

[Plates I.-IV.]

THE species described in the present paper were collected by Messrs. A., C., and F. Pratt in the region of the Arfak and Wandammen Mountains in 1914.

The types are in the collection of Joicey.

Our thanks are due to Sir G. F. Hampson, of the British Museum, to Lord Rothschild, and to Mr. G. T. Bethune-Baker, for help kindly given in comparing specimens. Further, Mr. L. B. Prout has examined all the Geometridæ and given us the benefit of his unrivalled knowledge of this family.

Arctiidæ.

Diacrisia ochrifrons, sp. n. (Pl. I. fig. 2.)

Allied to dinawa, B. Bkr.*, but easily distinguished by

the frons being black at the sides.

Q. Upperside.—Fore wing with pale ochraceous ground-colour with markings somewhat as in dinawa; the basal costal stripe extended below cell to inner margin, the suffusion being paler below 1 b; the discal band narrower than in dinawa, especially at the costa, the spot below vein 3 not joined to the one at the base of cellule 2, and spot below vein 1 a not touching inner margin; the upper part of post-discal band not running from apex as in dinawa, but from the costa, where it is 5 mm. broad, and curving outwards below vein 6 forms a large tooth-shaped patch; the

^{*} Diacrisia dinawa, Bethune-Baker, Nov. Zool. xi. p. 413, pl. iv. fig. 25 (1904) (Dinawa, Brit. N. Guinea).

spot below this in cellule 4 not divided; three small spots before the apex; traces of dots in the distal area in 3 and 4. Hind wing with a black mark on upper discocellular, a black anal spot, two spots on either side of vein 2, two large ones on either side of vein 5, no apical spot.

Underside.—Fore wing with markings as above, reduced in basal and median areas; discal band with costal patch separated from patch at lower angle of cell. Hind wing with a small round spot at middle of costa, other markings

as above.

Antennæ blackish brown; palpi and sides of frons blackish brown; central part of frons and vertex pale ochraceous; tegulæ and patagia dark ochraceous; patagia with a blackish basal patch, represented in dinawa by a free rounded spot and a dot at extreme base; thorax with a blackish mesial line; abdomen crimson above, pale ochraceous below, a black dorsal stripe and lateral series of spots; legs and pectus blackish brown, fore coxæ and femora crimson on ontside; a crimson tuft at base of thorax.

Length of fore wing 27 mm.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. 1 3.

Noctuidæ.

Subfamily ACRONYCTINE.

Cordylepalpa, nom. nov.

We substitute this name for Clavipalpa, J. & T., which is preoccupied (Clavipalpa, Joicey & Talbot, Trans. Ent. Soc. Lond. 1915 (June), p. 377).

Subfamily Noctuin Æ.

Athyrma spilota, sp. n. (Pl. I. fig. 3.)

Q. Upperside.—Fore wing with dark chestnut-brown ground-colour; a waved black basal line, thickened on costa; an antemedian line, black, irregular, and curved outwardly, thickened on the costa and posteriorly broadened to a triangular patch; a lilac-grey quadrate costal patch, bearing a black dot near its lower outer angle, forming the upper part of an antemedian band; lower part of antemedian band much broader, dark green; a yellowish stripe on vein 2; three curved yellowish marks below the submedian; a dark greenish costal patch of spots beyond the cell, outwardly defined by a thin grey post-discal line; a

lilac subterminal band, shaded with dark grey; some dark grey shading on distal and extreme basal areas; sparse lilac-grey dusting over the wing. Hind wing fuscous-grey, some sparse white scaling on outer margin; fringe fuscous, dusted with white.

Underside fuscous grey. Fore wing with inner half of fringe white; an ochreous tinge on costa near apex. Hind

wing finely dusted with white.

Antennæ reddish brown; palpi blackish brown; head fuscous mixed with grey-white; thorax and abdomen fuscous; femora and tibiæ fuscous, tarsi ochreous.

Length of fore wing 23 mm.

Hab. Augi Lakes, Arfak Mtns., 6000 feet, March. 2 ? ? . A specimen in the B.M. from Mt. Goliath.

Subfamily FOCILLINE.

Mecodina polyscia, sp. n. (Pl. I. fig. 5.)

Allied to ekeikei, B.-Bkr.*, but darker in colour, no white discocellular points and no serrated line within the pale post-discal band; subterminal black dots, which are absent in ekeikei.

3. Upperside.—Fore wing fuscous brown, proximal two-thirds with a purplish tinge; an irregular fuscous basal line; a black dot in the cell; two waved diseal lines, slightly outwardly curved from the costa, the space between them without purple tinge; inner edge of darker distal area defining a pale post-discal band; an irregular subterminal series of black dots between the veins; termen slightly purplish. Hind wing fuscous-brown.

Underside paler than above. *Hind wing* with a faint blackish discal band, and an indistinct subterminal line.

Antennæ ciliate, fuscous-brown; head, palpi, thorax, abdomen, and legs fuscous-brown.

Length of fore wing 20 mm.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. 1 &. In B.M. a specimen from Fak-Fak, Dutch S.W. New Guinea.

We place this species provisionally in the genus *Mecodina*, but it differs from the type-form of that genus in vein 5 of the hind wing arising above the lower angle of cell. The antennæ are of moderate length with long cilia.

^{*} Ceromacra ekeikei, Bethune-Baker, Nov. Zool. xiii. p. 284 (1906) (Brit. N. Guinea).

We must mention here that ekeikei, B.-Bkr., was placed by its author in the genus Ceromacra, Guen., together with other allied species. The type of this genus is from Surinam, and a comparison of this insect with polyscia shows that the New Guinea species do not belong to Ceromacra.

Zethes ochreomarginata, sp. n. (Pl. I. fig. 4.)

Allied to lilacea*, B.-Bkr., but differing in colour, and

without a series of dark dots near the post-discal line.

3. Upperside ochraceous brown with an oblique, double, and blackish post-discal line. Distal area beyond post-discal line, brownish ochraceous; proximal border of post-discal line suffused with black scaling; basal area brownish ochraceous. Fore wing with an irregular brown basal line; a reniform spot defined by pale ochreous; an oblique blackish line from lower inner edge of reniform to costa; a curved and outwardly-toothed blackish line from lower outer edge of reniform to costa; a marginal (not admarginal) series of black dots on the veins, the posterior two much larger than the others, on both wings.

Underside greyish ochraceous, much speckled with black;

a blackish post-discal band on both wings.

Antennæ brown, bipectinate for four-fifths, the pectines minutely ciliate and ending in a fine bristle, terminal fifth ciliate. Palpi ochreous-brown, black at sides; head, thorax, legs, and abdomen ochreous-brown.

Length of fore wing 18 mm.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. 1 3.

Subfamily DELTOIDINE.

Pseudaglossa bipupillata, sp. n. (Pl. I. fig. 6.)

We place this provisionally in *Pseudaglossa*, of which it may constitute a new section. It differs from other forms of the genus in the antennæ of the 3 being provided with bristles and cilia, whilst the palpi have a long third segment, also in the fore wing having a costal fold and fringe below.

3. Upperside.—Fore wing smoky grey, darker in basal half; an irregular basal black line, thicker anteriorly; a

^{*} Zethes lilacea, Bethune-Baker, Nov. Zool. xiii. p. 272 (1906) (Brit. N. Guinea).

strongly dentate black post-discal line; an irregular black subterminal line, nearly parallel to post-discal line and twice its thickness; a marginal series of black dots between the veins; orbicular small, fulvous, defined by black; reniform fulvous, defined by black and bearing two black pupils; a black suffusion between reniform and orbicular. Ilind wing grey; a faint discocellular mark and an indistinct subterminal line.

Underside grey. Fore wing darker at apex; a costal fold, bearing a fringe of smoky-grey hair, extending from base to end of cell. Ilind wing with darker suffusion at apex; a distinct discocellular mark; an indistinct and irregular post-discal line, and subterminal line, the latter angled in cellule 5 close to margin.

Antennæ black with simple bristles and cilia; palpi dark grey, paler on inside, third segment long; head dark grey; tegutæ fulvous, patagia black; abdomen grey, anal tuft pale ochraceous; legs black, mixed with pale ochraceous, femora with a fringe of hair on inside, fore tibiæ with tuft of hair at base on inside, mid and hind tibiæ with a tuft of hair at base on outside.

Length of fore wing 19 mm.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. (type), and Ninay Valley (1 & in B.M.).

Hypena montana, sp. n. (Pl. I. fig. 7.)

3. Upperside.—Fore wing grey-black; an oblique black line from apex to inner margin, thickened posteriorly and proximally edged with ochreous, which is for the most part shaded over; a thin black irregular post-discal line merged posteriorly with the outer oblique line; some thin black lines in the distal area below the oblique line, and a thin black subterminal line; an ochreous dot on the discocellular. Hind wing with costa and outer marginal border sooty grey, narrowly so beyond vein 2; rest of wing white to base.

Underside.—Fore wing sooty grey, white at extreme base; costa, and to a less extent the outer margin, dusted with grey-white. Hind wing as above, but marginal area irro-

rated with white; a dark discocellular spot.

Antennæ sooty grey; palpi, head, and thorax black; abdomen sooty grey, laterally with first three segments white, and ventrally white at base; legs grey mixed with black.

Length of fore wing 15 mm.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. 4 & &.

Lymantriidæ.

Euproctis chlorospila, sp. n. (Pl. I. fig. 8.)

Allied to edwardsi *, Newm., and huntei †, Warr.

3. Upperside.—Fore wing brownish fuscous with costal area fuscous-grey. Outer margin broadly bright yellow, deeply indented by ground-colour in cellule 3; a marginal series of spots of ground-colour between the veins, each spot, excepting the one iu 2, connected by a thin stripe to the proximal ground-colour; a bright yellow stripe on 1 c; an oblong white spot on the discocellular, edged with orange proximally and distally. Hind wing bright yellow.

Underside pale vellow.

Antennæ with comb pale rufous, shaft grey; head and thorax pale yellow; palpi grey-black; abdomen orange-yellow above, pale yellow below; pectus, legs, and analtuft pale yellow.

Length of fore wing 24 mm.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. 2 & 3.

Euproctis acrita, sp. n. (Pl. I. fig. 10.)

Allied to dersa; Moore, but differs in the yellow colour of the hind wings and absence of discoidal spot on fore wing.

3. Upperside orange-yellow. Fore wing with veins

whitish in distal area.

Underside as above. Fore wing with costa whitish. The co-type is paler, especially on the underside.

Antennæ with comb grey-brown, shaft pale yellow; palpi black above, grey-white below; head and tegulæ pale yellow, patagia orange-yellow; abdomen above orange-yellow, terminal segments black, below pale yellow; analtuft, pectus, and legs pale yellow.

Length of fore wing 17-19 mm.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. 2 & d.

† Euproctis huntei, Warren, Nov. Zool. x. p. 120 (1903) (Brit. N. Guinea).

‡ Euproctis dersa, Moore, Cat. Lep. E. I. C. ii. p. 347 (1859) (Java).

^{*} Teara edwardsi, Newm. Trans. Ent. Soc. Lond. 1856, p. 284, pl. xviii. figs. 9, 10 (Australia).

Euproctis chlora, sp. n. (Pl. I. fig. 11.)

3. Upperside with pale fawn ground-colour. Fore wing with costa grey-white, veins broadly grey-white. Hind wing with a pale yellow suffusion not reaching outer margin and deeper on the inner margin.

Underside paler than upper, more cream-colour. Hind

wing pale yellow on inner margin.

Antennæ with comb pale rufous, shaft white; head and thorax grey-white tinged with yellow; palpi grey-white, orange on inside; abdomen with dorsum too rubbed for description, sides yellow, mixed with grey-white, ventral surface grey-white; legs grey-white.

Length of fore wing 19 mm.

Hab. Arfak Mtns., Angi Lakes, 6000 feet, Jan.-Feb. 1 3.

Euproctis semirufa, sp. n. (Pl. I. fig. 9.)

Allied to mambara*, B.-Bkr., but has the fore wing more

reddish and hind wing with black inner margin.

3. Upperside.—Fore wing with purplish-brown ground-colour, median area reddish orange, an orange discocellular patch, outwardly diffuse. Hind wing pale orange, inner margin black.

Underside.—Fore wing orange; costa dark grey, outer

margin purplish brown. Hind wing as above.

Antennæ, head, thorax, and basal segment of abdomen rufous; palpi rufous, black on inside; abdomen black, mesial ventral surface grey, anal tuft pale ochreous; pectus and legs pale ochreous.

Length of fore wing 20 mm,

Hab. Arfak Mtns., Angi Lakes, 6000 feet, Jan.-Feb. 1 3.

Also in Tring Museum from Ninay Valley, Nov.

Colussa odontogrammata, sp. n. (Pl. III. fig. 14.)

Allied to eceicei, Bkr. +, but is smaller, with less defined markings and antennæ white.

* Euproctis mambara, Bethune-Baker, Nov. Zool. xv. p. 188 (1908) (Brit. N. Guinea).

† Anthela ekeikei, Bethune-Baker, Nov. Zool. xi. p. 403; l. c. p. 429, pl. vi. fig. 42, as Collusa ekeikei (1904) (Brit. N. Guinea).

3. Upperside dark yellow, fore wing paler in basal part and on costa. Fore wing with markings as in eceicei; the post-discal line is filled in with black, but is faintly marked; the waved lines and series of black dots in the distal area are indistinct; the distal line is marked on the costa by a black streak, a heavier black costal spot on the post-discal line; another black costal spot at the end of the very indistinct discal line. Hind wing with markings as in eceicei, but less defined, the post-discal line as on fore wing, the series of black dots obsolete.

Underside dark yellow with only sparse blackish dusting. Fore wing with the two discal dots white; post-discal line black and sharply marked; an indistinct outer line marked by a black streak on costa; apico-costal edge whitish. Hind wing with markings as in eceicei, but less defined;

lower area of outer margin washed with white.

Antennæ pale brown, shaft white; head black, vertex white; thorax pale ochraceous, abdomen darker; palpi and legs black, clothed with grey-white hair.

Length of fore wing 25 mm.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. One specimen.

Imaus nepha, sp. n. (Pl. I. fig. 12.)

3. Upperside snow-white. Fore wing finely dotted with grey-brown, and crossed by indistinct grey-brown lines. Basal and subbasal irregular lines; a discal dentate line; a post-discal crenulate line, directed inwards and approximating to discal line below vein 3; a subterminal irregular line; a series of black marginal dots between the veins; from 5 to 7 small dark spots on costa; a dark dot at origin of veins 4 and 5; a small round white spot in cell. Hind wing snow-white.

Underside snow-white, without markings.

Antennæ with comb pale rufous, shaft white; head, thorax, and abdomen white; palpi white, black at sides; pectus and legs white.

Length of fore wing 21 mm.

Hab. British and Dutch New Guinea.—Wandammen Mtns., 3000-4000 feet, Nov. (type), 10 & &; Ninay Valley, Arfak Mtns., 3500 feet, Nov.-Jan., 1 &; Oetakwa River to 3500 feet, Oct.-Dec., 1 &; Biagi, Mambare River, 5000 feet, Brit. N. Guinea, Jan.-April, 2 & &. Also in Tring Museum from Oetakwa River and Mt. Goliath.

Near ganara*, Moore, from Java and Borneo, but markings more distinct and fore wing thickly dotted.

Imaus basistriga, sp. n. (Pl. I, fig. 13.)

Allied to nepha, J. & T.

3. Upperside.—Fore wing snow-white finely dotted with dark brown and with dark brown markings. A zig-zag basal line, heavily marked below the cell; lower edge of cell from base to a fourth of vein 5 outlined with dark brown; a faint waved antemedian line; discal and post-discal lines very indistinct; former defined anteriorly; a faint strongly dentate subterminal line; black marginal dots between the veins; discocellulars streaked with dark brown; four dark costal dots before the apex; a rounded white spot in cell. Hind wing greyish fuscous, a white area beyond cell.

Underside greyish fuscous. Fore wing white below the

cell. Hind wing as above. Cilia white.

Antennæ with comb rufous, shaft white; head and thorax white; palpi white, black at sides; pectus and legs white; abdomen grey; anal tuft white.

Length of fore wing 12 mm.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. 1 3.

Dasychiroides obsoleta +, B.-Bkr. ♀. (Pl. I. fig. 14.)

This species is distinguished from other forms in the genus by the intraneural marginal dots on the fore wing.

2. Differs from the 3 in the basal half of fore wing,

except extreme base, being suffused with black.

Length of fore wing 28 mm.

Hab. British and Dutch New Guinea.

In Coll. Joicey from Biagi, Mambare R., Brit. New Guinea, 5000 feet, Jan. (2 & 3); Oetakwa River, S. Dutch New Guinea, Oct.-Dec. (2 & 3); Fak-Fak, Dutch New Guinea, 1700 feet, Dec. (1 &); Wandammen Mtns., 3000-4000 feet, Nov. (1 &, 1 \nabla). In Tring Museum from Ninay Valley, Arfak Mtns. (3 \nabla).

^{*} Lymantria ganara, Moore, Cat. Lep. E. I. C. ii. p. 344 (1859) (Java). † Dasychiroides obsoleta, Bethune-Baker, Nov. Zool. xi. p. 406, pl. vi. fig. 43, & (1904) (Brit. N. Guinea).

Notodontidæ.

Stauropus chloriolus, sp. n. (Pl. I. fig. 15.)

Near dubiosus*, B.-Bkr., and mixta†, B.-Bkr., but distinguished from the former by the black markings and green scaling of the fore wing, and from the latter especially by the darker fore wing and increased green irroration. This and other New Guinea Stauropus constitute a section of the genus having the anteunæ of $\mathfrak P$ pectinated, the comb being nearly as long as in the $\mathfrak F$. The hind wing with the disco-

cellular oblique and not sharply angled.

Q. Upperside.—Fore wing with dark reddish-brown ground-colour, irrorated with bright green scaling, especially at base and at distal margin. A thick black basal line and an antemedian line nearly parallel to it; a faint and oblique discal line, not distinct above vein 3, and nearly touching ante-median line at inner margin; a green lumulate discocellular spot; a heavy, black, irregular post-discal line, angled at veins 5 and 4; a well-defined black subterminal line, its lower part below vein 2 formed by two separate lines, the lower more proximal than the upper, crossing cellules 2 and 1 c. Hind wing rufous-brown; costal edge dark brown to the middle, followed by a streak and a quadrate apical patch, as in other members of the genus, of dark brown.

Underside rufous-brown, paler in the basal area.

Antennæ with comb black, shaft rufous-brown: palpi rufous-brown, mixed with green on inside; head and thorax grey-white, mixed with brown; abdomen, pectus, and legs rufous-brown.

Length of fore wing 25 mm.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. 2 9 9.

Stauropus leucocraspedus, sp. n. (Pl. II. fig. 2.)

Allied to mediobrunnea, B.-Bkr.‡, but easily distinguished

by the broad white distal margin of the fore wing.

Q. Upperside.—Fore wing with proximal two-thirds deep reddish brown with black markings. A baso-costal grey-white patch tinged with brown; a heavy, black, oblique

* S. dubiosus, Bethune-Baker, Nov. Zool. xi. p. 379 (1904) (Brit. N.

Guinea).

† S. mixta, Bethune-Baker, Ann. & Mag. Nat. Hist. ser. 8, vol. xvii.

p. 385 (1916) (Brit. N. Guinea).

‡ Stauropus mediobrunnea, Bethune-Baker, Ann, & Mag. Nat. Hist. ser. 8, vol. xvii. p. 384 (1916) (Brit. N. Guinea).

antemedian line; a broader, black, irregular discal line, fused with the antemedian line at inner margin and again with it near origin of vein 2; a heavy black post-discal line, angled at cellule 3, anteriorly with outer edge running to near apex, interspace between it and discal line below vein 2, suffused with black; a black costal dash behind post-discal line; distal margin white with a thin black wavy subterminal line; fringe brown with white dots at the veins. Hind wing white, dusted with brown; a brownish basal shade; a pale brown post-discal band, broadening anteriorly, and joined to the blackish quadrate apical patch; costa brown; fringe brown, mixed with white.

Underside rufous-brown. Fore wing whitish on inner

margin. Hind wing whitish at base.

Antennæ rufous; palpi rufous, tipped with white; head and thorax rufous, mixed with grey-white; abdomen pale reddish brown above, ochreous below; legs reddish brown.

Length of fore wing 20 mm.

Hab. Arfak Mtns., Angi Lakes, 6000 feet, March. 1 9.

Stauropus melanogramma, sp. n. (Pl. I. fig. 16.)

Allied to dubiosus, B.-Bkr.*, but without green scaling,

and with a prominent black post-discal line.

3. Upperside.—Fore wing greyish brown; two obscure and oblique basal lines; a well-defined irregular black post-discal line, angled outwards at vein 4 and thence somewhat crenulate to inner margin; an indistinct and waved brown subterminal line; a deep brown curved subapical costal patch or band, appearing somewhat as a smudge. Hind wing pale rufous with a deep brown apical patch.

Underside pale rufous; basal area ochraceous.

Antennæ rufous; palpi ochraceous, sides reddish brown; head and thorax grey-brown; abdomen brownish ochraceous; legs reddish brown.

Length of fore wing 23 mm.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. 13.

Stauropus trisospylus, sp. n. (Pl. II. fig. 1.)

Allied to kebeæ, B.-Bkr.†, but smaller, paler, and fore wing with green scaling.

* Stauropus dubiosus, Bethune-Baker, Nov. Zool. xi. p. 379, pl. vi. fig. 39 (1904) (Brit. N. Guinea).

† Stauropus kebeæ, Bethune-Baker, Nov. Zool. xi. p. 378, pl. v. fig. 52 (1904) (Brit. N. Guinea).

3. Upperside.—Fore wing reddish brown, thickly irrorated with grey-white and sparsely so by pale green. A reddish-brown and deeply-curved basal line; a subbasal U-shaped line not touching lower submedian, and parallel to it an antemedian line; a forked discal line, its upper part formed by the discocellnlar, its lower part divergent from vein 3; a donble post-discal line, angled in cellule 3, the outer line black and well defined; an irregular subterminal line; at end of cell a rounded white spot centred with brown, and white scaling above it on costa; a similar and smaller spot outside the end of cell, and a white spot above it on costa; a similar spot below the cell on the antemedian line; fringe dotted with white at the veins. Hind wing with basal two-thirds white, distal margin pale rufous; costa scaled with brown; a quadrate blackish apical patch.

Underside.—Fore wing reddish brown; inner margin

white. Hind wing white, some brown dusting at apex.

Antennæ rufons; palpi dark reddish brown, tipped with white; head and thorax reddish brown, irrorated with white scaling; legs reddish brown marked with white; pectus dirty white; abdomen missing.

Length of fore wing 18 mm.

Hab. Arfak Mtns., Angi Lakes, Jan.-Feb. 1 3.

Gargetta melanosticta, sp. n. (Pl. II. fig. 5.)

Distinguished from punctatissima, B.-Bkr.*, by the large

and blackish stigma.

3. Upperside.—Fore wing ochraceous, irrorated with blackish brown. A double waved basal line; a very indistinct double antenedian line, somewhat crenulate; a post-discal row of black dots between the nervures, the anterior two with two others placed next them, the third below, the fourth and fifth shifted inwards, the sixth, seventh, and eighth placed more proximal in an oblique line; distally of these an indistinct blackish-brown crenulate line; a subterminal series of eight distinct black dots; a marginal series of black dots triangularly shaped; an oblong and slightly rounded blackish-brown stigma edged with black; a triangular blackish costal shade from apex to post-discal line. Hind wing pale rufous, ochreons at the base.

Underside ochraceous, hind wing paler.

Antennæ ochraceous; palpi ochraceous, mixed with brown

^{*} Gargetta punctatissima, Bethune-Baker, Ann. & Mag. Nat. Hist. ser. 8, vol. xvii. pp. 382-383 (1916) (Brit. N. Guinea).

on the outside; head and thorax reddish brown, mixed with ochraceous; abdomen and posterior legs ochraceous; fore and intermediate legs ochraceous marked with blackish brown.

Length of fore wing 24 mm.

Hab. Wandammen Mtns., 3000-1000 feet, Nov. 4 & 8.

Omichlis leucosticta, sp. n. (Pl. II. fig. 4.)

Distinguished from other species of the genus by the white

serrate post-discal band.

dots black, edged with white; below the cell six curved white marks, in two rows, with some scaling on their inner side; a narrow white post-discal band, its proximal part formed of rounded white spots between the veins, each with a black dot on its inner side, and its distal part being a serrate line which touches the spots, this line edged by black vein-dots on its outer side; a subterminal row of indistinct black dots with white scaling; some black dusting in the anterier area between post-discal band and the margin, and also between the post-discal band and the white median spots; a black double discocellular dot. Hind wing pale rufous-brown with a double white anal spot placed in some blackish scaling.

Underside pale rufous-brown, hind wing whitish.

Antennæ rufous; palpi, head, and thorax rufous mixed with white; abdomen above pale rufous, below ochraceous; legs ochraceous.

Length of fore wing, 3 20 mm., 2 22 mm.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. 13,

Omichlis plagiosa, sp. n. (Pl. II. fig. 3.)

Allied to transversa, B.-Bkr.*, but distinguished by a longitudinal line from the base to the outer margin of

fore wing.

Q. Upperside.—Fore wing cinnamon-brown with darker brown lines. A basal line, angled and indistinct; a median line, angled below the middle; a discal line, well defined, straight and oblique; a post-discal line, anteriorly slightly curved, posteriorly forming an S, in the lower angle of

^{*} Omichlis transversa, Bethune-Baker, Nov. Zool. xv. p. 178 (1908) (Brit. N. Guinea).

which is placed a rounded black spot divided by a grey dash; a subterminal line, slightly crenulate; a mesial longitudina line, thicker than the others, running from the base along lower edge of cell and vein 4 to outer margin; reniform small, bright ochreous. Hind wing pale cinnamou-brown.

Underside.—Fore wing rufous-brown, paler at base and inner margin. Hind wing ochreous, dusted with rufous; a thick brown post-discal line, strongly curved at nervure 5.

Antennie and palpi rufous-brown; thorax cinnamonbrown; abdomen greyish ochreous, dusted below with rufous; legs cinnamon-brown, the posterior ones ochreous on the inside.

Length of fore wing 21 mm.

Hab. Arfak Mtns., Angi Lakes, 6000 feet, March. 1 9.

Lasioceros dentilinea, sp. n. (Pl. II, fig. 6.)

The genus *Lasioceros* was described by Mr. Bethune-Baker in Nov. Zool. vol. xi. p. 380 (1904), from a single specimen from the Aroa River, British New Guinea.

As the species we now describe differs in certain particulars from Baker's diagnosis of the genus, we considered it necessary to examine the type in the Tring Museum. Mr. L. B. Prout has very kindly undertaken to do this, with the result that we have to amend the original diagnosis.

The eyes are glabrous. The antennæ have the lower surface evenly ciliated to the tip. The femora are somewhat hairy. The hind wing has vein 8 approximating to 7 and not anastomosing.

L. dentilinea diverges from the generic structure as seen in aroa, B.-B.; and will constitute a new section of the genus. As it is in secondary sexual characters that dentilinea differs from aroa we do not feel justified in giving this a separate generic distinction. The new section of Lasioceros will be constituted by the following structure seen in 3 dentilinea.

The antennæ with upper surface smoothly scaled, lower surface without concavity, pilose or thickly ciliate, with longer hairs on the outside. Hind tibiæ bearing a thick comb of hair. Underside of wings with much hairy scaling.

3. Upperside.—Fore wing greyish ochreous, paler in the cell, with an apico-costal white suffusion which is also present on the costa at a third from base; intervening space filled in by a somewhat quadrate blackish patch from costa to vein 3, but not well-marked below costa; a curved black mark on discocellular, and below it a rounded dark spot; a

subterminal white line, strongly dentate anteriorly, but becoming obsolete posteriorly; veins streaked with blackish behind this line, these streaks separated from a post-discal series of dark points on the veins by a series of white dots. Hind wing fuscous with a paler basal area.

Underside paler than above; fore wing with no markings

except a blackish streak on costa.

Head and palpi ochreous mixed with brown; antennæ brown, the simple ciliation of inner side as in aroa, but having nothing corresponding to the black sexual comb of aroa; tegulæ blackish brown; patagia grey-brown; abdomen grey with black anal tuft; legs grey, mixed with blackbrown.

Length of fore wing 20 mm.

Hab. Wandammen Mtns., 3000-4000 feet, 1 & (type). Also in Tring Museum from Octakwa River, Biagi, Kumusi River, Collingwood Bay. and Goodenough Island. In B.M. 2 & from Fak. Fak, Dutch N. Guinea, 1700 feet, Dec., 1 & Fak. Fak, Jan.—Feb.

L. aroa is represented in the Tring Museum by the type (Aroa River), and 2 3 3 from Rook Island and Goodenough

Island.

The systematic position of Lasioceros is not easy to place. We retain it in the Notodontidæ, in which family it was placed by Baker. Our reasons for doing so are on account of the short third joint of palpus and the fore wing having vein 1 a running into 1 b. This latter character is found in most Notodontidæ, but is not typical of Hypsidæ, to which family the genus has been referred by Sir George Hampson. The palpi are not Hypsid in character, but the position of vein 5 of the fore wing and 8 of the hind wing would afford some justification for regarding it as a Hypsid. Taking the characters as a whole, we consider that the position of vein 5 of the fore wing is a divergence from the normal, just as occurs in several Geometridæ.

Since these considerations were penned, it has come to our notice that the importance of the position of vein 5 of the fore wing was doubted by an American worker as a result of his investigations into the structure of the basal

abdominal organ.

William J. M. Forbes, in an article "On the Tympanum of certain Lepidoptera" ('Psyche,' xxiii. n. 6, pp. 183-192, Dec. 1916), finds a special type of the basal abdominal organ to be characteristic of the Noctuidæ and notes (p. 188) that "Alypia and the Notodontidæ show interesting variants of this type," which in his scheme on pp. 189-90 he gives as

"Type 3 (parapleural fovea): Notodontidæ, Noctuidæ, Agaristidæ." In his "Summary and Conclusions," he observes that "A study of the base of the abdomen.... suggests: (1) The Notodontidæ are better placed near the Noctuidæ than near the Geometridæ and Bombycidæ," and on p. 189 he remarks, a propos of leaving "the Notodontidæ as a solitary trifid family in a mass of Quadrifidæ," that "possibly the importance of the position of M² (vein 5) in the fore wing is less than it has been considered. Already we give little weight to it in the hind wing and in certain Hydriomenid Geometridæ such as Eudule."

Eupterotidæ.

Nervicompressa bakeri, sp. n. (Pl. III. fig. 15.)

Nearest to Nervicompressa unistrigata, Bethune-Baker, Nov. Zool. xi. p. 390 (1904) (Brit. New Guinea). Larger, wings more rounded, and discal line of fore wing placed nearer base.

3. Upperside.—Fore wing yellowish brown, apex and outer margin purplish brown, but faintly suffused below vein 5; a heavy brown straight discal line from costa at its middle to middle of inner margin; basal area with greyish-white scaling. Hind wing pale rufous-brown; a thin dark discal line; a faint post-discal line and indications of a subterminal line.

Underside darker. Fore wing with discal line faintly showing through from above. Hind wing with markings defined; subterminal line crenulate and space between it and margin sealed with brownish.

Antenne black; head and tegulæ rufous; patagia ochreous; abdomen, pectus, and legs rufous; tarsi black.

Length of fore wing 21 mm.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. 7 & d.

Geometridæ.

Subfam. ENOCHROMINÆ.

Onycodes leptoctenopris, Prout, \(\varphi \).

(Pl. III. fig. 8.)

O. leptoctenopris, Prout, Nov. Zool. xx. p. 391 (1913) (Mt. Goliath).

Q. Upperside with pinkish-brown ground-colour. Fore wing with an indistinct basal line; a greyish discal band Ann. & Maq. N. Hist. Ser. 8. Vol. xx. 5

widening on costa; a double oblique post-discal line reddish brown, the inner one above vein 6 curved inwards to costa, the outer one reaching apex, both lines curved outward and inward below vein 2. A third post-discal line, bluish white and strongly dentate, thicker posteriorly and edged with blackish on inside below 3. Hind wing darker with paler basal area, and paler narrow marginal edge.

Underside yellowish brown sparsely scaled with black. Fore wing with oblique post-discal brown line; some greyish

scaling at apex.

Antennæ yellow-brown. Head and thorax piukish brown; abdomen and legs yellow-brown; pectus grey-white.

Length of fore wing 20 mm.

Hab. Arfak Mtns., Angi Lakes, 6000 feet, March. 1 9. As the above specimen was identified by Mr. Pront as the 9 of his species, we therefore make it the Heautotype (H.t.). For the use of this term see Schuchert & Buckman, Ann. & Mag. Nat. Hist. ser. 7, vol. xvi. p. 102 (1905).

Subfam. HEMITHEIN.E.

Hypodoxa pallida, sp. n. (Pl. IV. fig. 1.)

Near regina, Prout, Nov. Zool. xxiii. p. 8 (1916) (Rook Isd.).

Paler than regina and without discal spot on hind wing below.

3. Upperside grevish green. Fore wing with base brownish black to near origin of vein 2 and leaving a bar of ground-colour on the costa; outer edge of black area curved; a black discal dot; a black post-discal line becoming obsolete posteriorly; it is slightly waved and outwardly curved to vein 4, whence it bends inwardly and is more irregular to the inner margin; a chocolate-brown post-discal band, well marked from costa to vein 4 below which it is represented by some sparse scaling; a waved subterminal brown line becoming closer to the margin posteriorly; some brown scaling in the marginal interspace in cellules 5, 4, and 2; a blackish marginal line which is accentuated between the veins. Hind wing with brownish-black basal area to end of cell; cell-tuft and part of tuft below it pale green; a blackish thin post-discal line, irregularly waved and edged with whitish distally; interspace between post-discal line and basal area paler than rest of wing; an indistinct submarginal line formed of whitish dots between veins; outer margin narrowly edged with brown; a chocolate-brown stripe filling cellule 2 from base to margin.

Underside grey-white, basal area pale chrome-yellow; a broad bluish-black distal band on both wings with well-defined inner edge on the fore wing touching margin in 2 and 4 and leaving a subterminal row of white dots, on the hind wing with an irregular outer edge. Fore wing with a well-defined black discal spot.

Head pale green; tegulæ dark green; patagia chocolatebrown mixed with black; abdomen stone-grey; dorsal tuft brown, a pale yellow lateral stripe on first 5 segments; legs and underside of body stone-grey; fore legs chocolate-brown on outside; palpi grey-white, first segment chocolate-

brown.

Length of fore wing 18 mm.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. 1 3.

Anisozyga veniplaga plena, subsp. n. (Pl. IV. fig. 6.)

Anisogamia veniplaga, Warr. Nov. Zool. xiv. p. 130 (1907) (Biagi).

3. Differs in having the apical patch on the fore wing entire, and in the patches on the inner margin and on the hind wing being larger.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. 4 & d.

Prasinocyma angiana, sp. n. (Pl. IV. fig. 13.)

Probably nearest to corolla*, Prout.

Q. Colour sea-green as in bicolor, Warren †. Basal line much more angulated, terminal dots much smaller (?), discal dot of fore wing accompanied by a reddish mark, abdomen with a dorsal line; the two latter points associate this form with the corolla group. Differs from corolla, Prout, in colour and shape, the costal margin being relatively less elongate.

Length of fore wing 18 mm.

Hab. Arfak Mtns., Angi Lakes, 6000 feet, March. 1 9.

Subfam. LARENTIINÆ.

Anapalta semiviridis, sp. n. (Pl. III. fig. 4.)

Q. Upperside.—Fore wing with black ground-colour mixed with brown scaling and dark green markings. A thin basal

* Prasinocyma corolla, Prout, Nov. Zool. xx. p. 431 (1913) (South Dutch N. Guinea).

† Chlorochroma bicolor, Warr. Nov. Zool. xiv. p. 131 (1907) (Brit. N. Guinea).

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line. An irregular double median line from costa to inner margin, crossing cell below vein 2, followed by another indistinct irregular double line crossing cell at vein 2; the median vein striped with green. Beyond cell, distal area green, lighter proximally, defined by an irregular dentate edge. Some thin dark scalloped lines are visible in the green area, also a dark narrow subterminal band from the tornus to vein 3, and becoming obsolescent beyond; some dark shading below apex shows up a short and strongly dentate green line. A yellowish-green costal dash and a stripe below it cuts off a black apical spot, and proximally of this is a black costal bar which does not extend to the proximal ground-colour. Hind wing rufous-brown with a black tuft of hair across end of cell.

Underside rufous-brown. Fore wing paler in lower median

area and in outer marginal area.

Head, thorax, and abdomen grey-green, brownish ochreous below. Legs rufous-brown. Antennæ grey-brown.

Length of fore wing 22 mm.

Hab. Wandammen Mts., 3000-4000 feet, Nov. 2 ? ?.

Crasilogia dispar fulvitincta, subsp. n. (Pl. IV. fig. 11.)

C. dispar, Warr. Nov. Zool. x. p. 374 (1903) (Aroa River).

Q. The ground-colour is more tawny than yellowish. The first discal line is less strongly dentate and the band is narrower; the basal pale band is more constricted. On the hind wing below the dentate lines are thicker and closer together.

Hab. Arfak Mtns., Angi Lakes, 6000 feet, Jan.-Feb.,

1914. One specimen.

Sauris griseolauta arfakensis, sp. n. (Pl. IV. fig. 9.)

S. griseolauta, Warr. Nov. Zool. xiii. p. 112 (1906) (Brit. N. Guinea).

9. Differs from *griseolauta* in being smaller, greener, median band of fore wing narrowing posteriorly, and hind wing lighter in colour.

Length of fore wing 12 mm.

Hab. Angi Lakes, Arfak Mtns., 6000 feet, March. One specimen.

Sauris definita, sp. n. (Pl. IV. fig. 15.)

Near Remodes volcanica, Butl. Ann. & Mag. Nat. Hist. ser. 5, vol. xx. p. 247 (1887) (Shortland Island). Differs

from this in the fore wing being rather less broad and more

sharply marked.

Q. Upperside.—Fore wing yellowish green with black markings consisting of irregularly waved transverse lines; three thick basal lines separated by a thin greenish line from two discal lines; a discocellular spot; two heavy post-discal lines followed by two faint greenish lines placed close together; two greenish lines in distal area, marked irregularly with black especially in cellules 1 b, 1 c, 2, 4, 5, 7, and at costa; a crenulate subterminal line; a series of black marginal spots on the veins. Hind wing greyish white with a darker marginal area.

Underside greyish brown with a silky gloss; basal areas

paler.

Antennæ missing; head, thorax, and abdomen yellowish green; legs ochreous; abdomen below ochreous.

Length of fore wing 20 mm.

Hab. Angi Lakes, Arfak Mtns., 6000 feet, March. One specimen.

Subfam. Geometrinæ.

Plutodes connexa wandammenensis, subsp. n. (Pl. IV. fig. 2.)

P. connexa, Warr, Nov. Zool. xiii. p. 137 (1906) (Brit. N. Guinea).

3. Distinguished from the allied form in the more strongly developed silvery edgings, in the triangular-shaped yellow costal area, and the more oblong-shaped yellow inner marginal area on the fore wing, and in the reduced yellow discal area on the hind wing.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. 1 3.

Eurychoria albicosta, sp. n. (Pl. III. fig. 9.)

Near flavirupta, Warr. Nov. Zool. x. p. 402 (1906) (Aroa), Q. Eurychoria flavirupta, Prout, l. c. xiii. p. 40 (1916) (Arfak), J.

3. Differs especially from the allied species in having the costal edge of fore wing snow-white.

Upperside rufous-brown irrorated with darker brown. Both wings with a black discocellular dot and a post-discal row of white dots on the veins.

Underside ochreons speckled with blackish. Fore wing darker distally, with a faint median and post-median band. Hind wing with a faint post-median crenulate line, outer margin edged with purplish brown. Both wings with a black discocellular dot.

Antennæ yellowish brown, white at base; palpi, head, and thorax rufous-brown; abdomen grey-brown; legs, pectus, and abdomen below paler ochraceous.

Length of fore wing 18 mm.

Hab. Arfak Mtns., Angi Lakes, 6000 feet, March. 1 3.

Nadagara camura, sp. n. (Pl. IV. fig. 14.)

3. Upperside reddish brown strongly suffused with dark purplish brown. Fore wing with dark basal line indistinct; a dark discocellular dot; a dark brown post-discal line, its upper part directed distad from centre to vein 6, where it is strongly angled and oblique to inner margin, its lower part from vein 6 edged outwardly by an indistinct grey-white line which is traversed by a dark line; an indistinct subterminal grey-white wavy line interrupted between veins 4 and 6; some grey-white scaling at apex. Hind wing with dark brown median line; an indistinct and dark post-discal band, dentate on the veins, and within which is a strongly waved grey-white line; a pale and indistinct waved submarginal line.

Underside rufous-brown. Fore wing with a blackish discocellular mark; discal line and two post-discal lines

indistinct. Hind wing a little paler.

Head, thorax, and abdomen above dark brown; palpi rufous; fore coxæ rufous; legs grey; abdomen below greybrown.

Length of fore wing 20 mm.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. 1 3.

Nadagarodes sabulosus, sp. n. (Pl. IV. fig. 12.)

\$\text{?.}\$ Upperside ground-colour rufous-brown with grey-white markings dusted with blackish. Both wings with a grey-white proximal area extending beyond cell and traversed by a narrow median band of ground-colour. An irregular and interrupted band of grey-white; below apex a grey-white

marginal patch invaded by ground-colour.

Underside.—Both wings rufous-brown, darker distally. An irregular dark brown median line; a post-discal double line strongly dentate, better defined on fore wing; outer line ill-defined on hind wing; an indistinct waved submarginal line; on fore wing in cellules 6-7 below apex a white marginal spot invaded by ground-colour in lower part. A black discocellular line on fore wing.

Antennæ, head, thorax, and abdomen grey-brown above, rufous-brown below; legs rufous-brown.

Length of fore wing 20 mm.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. 1 ?.

Gubaria albimedia novoguinensis, subsp. n. (Pl. III. fig. 5.)

G. albimedia, Warr. Nov. Zool. iii. p. 409 (1396) (Java).

Q. The white hands are narrower. The hind wing bears a larger black post-discal patch between veins 3 and 5 and another behind 3, narrowing to the submedian; these patches are narrowly separated from the band by an ochreyellow line.

Underside with basal yellow on both wings reduced. Hab. Wandammen Mtns., 3000-4000 feet, Nov. 1 2.

Pseudomiza opaca, sp. n. (Pl. IV. fig. 7.)

?. Pale ochreous-brown with darker brown markings.

Upperside.—Fore wing with a thick median line crossing cell below vein 2; a discal dot; a narrow discal band slightly enrved, obsolescent near costa; a well-defined oblique post-discal line not reaching costal edge; outer distal area dark brown leaving a marginal band of ground-colour below vein 4; a series of black marginal dots, one in each cellule. Hind wing with a broad and not well-defined discal band, within which is a dark post-discal line; outer discal area darker than the basal; marginal black dots, one in each cellule.

Underside paler than upperside. Fore wing with a short dark basal line; an indistinct discal line; a post-discal band narrowing below vein 5; marginal dots between the veins as above. Basal two-thirds of median area scaled with metallic bluish green visible in a side light. Hind wing with a dark discal spot, a faint post-discal curved line, marginal dots as above.

Antennæ pale brown; head and thorax dark ochreous-

brown; abdomen grey-brown; legs grey-brown.

Length of fore wing 20 mm.

Hab. Arfak Mtns., Angi Lakes, 6000 feet, March. 1 9.

Polyacme punctilinea, sp. n. (Pl. IV. fig. 4.)

? . Upperside yellow-brown with a reddish tinge. Fore

wing with a nearly straight basal line formed of black dots; an indistinct and but slightly curved median line; a brown discal spot; an indistinct and nearly straight post-discal line and almost parallel with it proximally a series of black points on the veins; post-discal line crossed in cellule 2 by a faint grey line running from apex to inner margin below origin of vein 3 and accentuated by black vein points; a grey-white subterminal line interrupted by the veins, obsolete anteriorly and posteriorly, and more defined in cellules 3-5, the spot in 3 being well marked; discal marginal area darker than rest of wing. Hind wing with a well-defined black discal spot; an indistinct and straight median line; two post-discal rows of black vein dots, the outer formed along a faint grey waved line; a distinct grey-white subterminal line angled at vein 5; discal area below this and faint postdiscal line, darker than basal and marginal areas; a marginal row of black dots between the veins. Fringes of both wings edged anteriorly with grey-white.

Underside paler than above with upperside markings more or less defined. Both wings with a darker brown and wide post-discal band, its inner edge ill-defined, the outer dentate; outer marginal area grey-white with a marginal row of

black dots between the veins.

Antennæ, head, thorax, and abdomen grey-brown, legs dusted with black.

Length of fore wing 19 mm.

Hob. Arfak Mtns., Angi Lakes, 6000 feet, March. 1 2.

Epitherapis ruptimacula, sp. n. (Pl. III. fig. 10.)

J. Upperside.—Fore wing pale ochreous sparsely dusted with black. A faint dark oblique line crossing cell near its end: a black dot on discocellular at vein 5; a dark subapical line from costa to vein 6 thence curving downwards to below 5, its lower part accentuated by two black dots; a thin post-discal line of pure ground-colour, narrowly edged posteriorly and proximally with black, and marked with a white spot above vein 6; this line runs from inner margin at nearly a third from tornus to the costa near apex, is inwardly curved to vein 6, and thence angled outwardly to costa; lower part of post-discal line from vein 4 borders a large black patch which is interrupted by the veins and forms four spots in the interspace below 2. Hind wing pale ochreous, sparsely speckled with black in inner and median area; some white suffusion in median area and on inner

margin; a dark oblique discal line showing through from below, and joined to it at inner margin an outwardly curved line, which joins it again at middle of cell; an irregular post-discal line, anteriorly obsolete, defined from vein 5 and crenulate to inner margin; this line borders two rounded black spots in 2 and 3, and the trace of a larger spot below them, which is not filled in with black.

Underside yellow-ochreous, sparsely speckled with black. Fore wing paler in basal and median area, here without black dots. Markings as above, but here defined; a dark discal line, slightly curved. Hind wing with markings as above, and a thin curved post-discal line which borders inner

edge of black spots; a black discocellular dot.

Antennæ black, shaft ochreous; head and palpi ochreousgrey; thorax and abdomen pale ochreous, latter with a brownish dorsal stripe; legs pale ochreous marked with brownish.

Length of fore wing 22 mm.

Hab. Augi Lakes, Arfak Mtns., 6000 feet, Jan.-Feb. One specimen.

Hygrochroa purpurascens, sp. n. (Pl. IV. fig. 3.)

3. Upperside purplish brown irrorated with yellow-brown. Fore wing with a pale yellow-brown discal patch invaded by ground-colour, occupying outer two-thirds of cell and adjacent costal area, and proximally of discal line reaching below cell to submedian, its upper part divided by a narrow brown discal line which is slightly curved; an indistinct black post-discal line outwardly curved from costa to vein 4 and then proximally oblique; a small rounded yellow-white subapical spot and a larger and more oblong spot of similar colour below vein 2. Hind wing with a dark brown slightly curved basal line; basal area irrorated with yellow-brown; a post-discal row of 5 or 6 yellow-white spots; proximally of these a row of black dots, one on each vein.

Underside paler than the upper, strongly dusted with blackish and much irrorated with yellow-white; markings less distinct than above.

Head, antennæ, and palpi yellow-brown; thorax rufousbrown; legs, abdomen, and underside of thorax pale purplish brown.

Length of fore wing 18 mm.

Hab. Arfak Mtns., Angi Lakes, 6000 feet, March. 1 3.

Cleora flaccida constricta, subsp. n. (Pl. IV. fig. 16.)

Aleis flaccida, Warren, Nov. Zool. x. p. 388 (1903) (Aroa).

9. Differs from the allied form in the two discal lines of hind wing becoming much closer together below vein 3. Also on the underside there is no dark margin to the wings. Hab. Wandammen Mtns., 3000-4000 feet, Nov. 19.

Cleora scripta, sp. n. (Pl. III. fig. 7.)

9. Upperside.—Ground-colour grey-white dusted strongly with dark brown. Fore wing with a black basal line cro-sing cell below vein 2 where it is slightly angled. An irregularly curved black post-discal line which thickens posteriorly; it curves outward from costa to vein 5, then inward to 4, then outward to below 3, and thence inward and waved to inner margin. A marginal border slightly darker than the rest of the wing. Hind wing with a curved black post-discal line which is thickest below vein 6. A discocellular spot outlined with black. Marginal border slightly darker than the rest of the wing.

Underside stone-grey, the dark lines showing through

from above.

Head, thorax, and abdomen grey-white; legs and underside tinged with brown.

Length of fore wing 23 mm.

Hab. Arfak Mtns., Angi Lakes, 6000 feet, Jan.-Feb. 1?.

Cleora discipuncta, sp. n. (Pl. IV. fig. 8.)

Nearest hoplogaster, Prout, Nov. Zool. xxiii. p. 51 (1916)

(Cent. Dutch N. Guinea).

3. Upperside.—Fore wing with yellow-brown ground-colour irrorated with black. Base black; a subbasal white line, sharply angled in the cell and edged with black distally; two black spots in the cell, the inner one diffuse, the outer rounded and well defined; a black patch in the median area reaching vein 3; an outwardly-curved post-discal white line bordered proximally by a band of black spots; a subterminal series of eight small white spots edged with black, the anterior five connected, one in cellule 3, one in 2, and one on the inner margin bordering an inner black spot; the third anterior spot diffused proximally, forming a streak

with a black patch below it; a marginal series of black spots between the veins; costa dusted with black points. Hind wing grey-white with a dark discocellular spot, a thin post-discal dark line, a marginal row of from 3-5 black dots, fringe pale brown.

Underside of fore wing paler with blackish markings as above. Hind wing dusted with blackish, a well-defined black

discal spot, a faint post-discal line and marginal dots.

Antennæ yellowish brown, marked with black; head, abdomen, and legs pale yellowish brown; patagia black.

Length of fore wing 17 mm.

Hab. Arfak Mtns., Angi Lakes, 6000 feet, Jan.-March. 3 & &.

Paralcis aurantifascia latimacula, subsp. n. (Pl. IV. fig. 10.)

P. aurantifascia, Prout, Nov. Zool, xxiii. p. 67 (1916) (Mt. Goliath).

3. The pale band on fore wing is much broader and leaves a narrower margin; the proximal edge of band is straight below vein 3 and directed more distad; the basal area limited by the basal line is filled in with grey-brown. Below, the fore wing has the orange band broader, leaving a smaller dark apical area.

Hab. Arfak Mtns., Angi Lakes, 6000 feet, Jan.-Feb.,

1914. One specimen.

Paralcis albistigma, sp. n. (Pl. III. fig. 2.)

2. Upperside.—Fore wing with pinkish-brown groundcolour, much irrorated with black. An irregular black basal line, edged with white on inside. A dark discal band, its inner edge nearly straight and crossing cell at vein 2, its outer edge slightly curved outwardly and crossing end of cell and origin of vein 3. Adjacent to this is a broad white band sparsely scaled with ground-colour, reaching from costa to inner margin; its upper part to vein 4 is twice as wide as lower part, and in cellule 3 it runs out to the margin and fills the cellule; there is a dark commashaped costal spot which runs out into a thin, irregular, and indistinct line traversing the band. A waved submarginal white line, sharply angled below vein 3. Marginal border pinkish brown, white at apex. Hind wing grey with a faint white irregular subterminal line which becomes obsolescent anteriorly.

Underside with grey ground-colour. Fore wing with a

subapical band of orange-yellow extending to inner margin, and widest in cellule 3. In the type-specimen it is reduced proximally, but in the co-type it slightly invades the cell and its edges are nearly straight; in cellule 3 on the margin a square white spot joins the band. In the co-type is a thin waved yellow subterminal line from the costa to the white spot. Hind wing without markings.

Head, thorax, antennæ, and abdomen grey above and

below; palpi and legs blackish, marked with grey.

Length of fore wing 22 mm.

Hab. Arfak Mtns., Angi Lakes, 6000 fcet, Jan.-March. $2 \circ \circ$.

Paralcis indistincta, sp. n. (Pl. IV. fig. 5.)

3. Upperside.—Fore wing with smoky-black ground-colour and grey-white markings; a faint dark basal line crossing cell at vein 2; an indistinct dark median line, thicker anteriorly, crossing cell at vein 3, where it is angled, the upper part being at right angles to costa; a better-defined and thin post-discal line, curved inwards from costa to vein 6, then outward to 5, and thence oblique to inner margin; the spaces between these lines more or less filled in with a pale and indistinct irroration of grey-white. A nebulous grey-white submarginal band, more distinct near the apex, and followed by a few white dots between the veins. Hind wing smoky grey with a darker and indistinct post-discal line; an indistinct dark submarginal line, which traverses a grey-white patch at inner angle; margin edged with blackish.

Underside smoky grey. Fore wing with a dark discocellular streak and some indistinct yellowish marks distally, which form a submarginal line interrupted in the middle; some yellowish scaling beyond the cell and at the apex. Hind wing with pale spot at anal angle and no other markings.

Thorax grey-brown; antennæ, head, and abdomen smoky grey: legs and underside paler.

Length of fore wing 20 mm.

Hab. Arfak Mtns., Angi Lakes, 6000 feet, March. 1 3.

Paralcis costimacula, sp. n. (Pl. IV. fig. 17.)

Q. Upperside.—Fore wing with yellowish-brown ground-colour, dusted with black. A black and well-marked dentate

basal line more heavily marked on costa and at inner margin; a faint median line angled outward at vein 2; a quadrate snow-white costal patch reaching below vein 5, and its greater part lying within the cell; a waved post-discal line outwardly angled at vein 4, its upper part traversing the costal patch and more heavily marked, its lower part somewhat obscured by forming the outer edge of part of the median black band; a blackish median band, its inner edge below vein 2 defined by median line and its outer edge by the post-discal line, anteriorly slightly invading cell and filling inner two-thirds of cellule 3, and at base of vein 4 is joined to a black apical area; on inner margin at the outer edge of the median line is a small white spot; a pale submarginal line, irregularly dentate and white at the costa; below vein 2 a black apical area reaching vein 4, and leaving a narrow band of ground-colour distally of the white costal patch, also a narrow marginal edging; a series of black marginal dots proximally rounded and separated by the veins; fringe smoky grey, at veins 3 and 4 yellow-white. Hind wing smoky grey with a slightly darker marginal band.

Underside smoky grey. Fore wing with a post-discal band of pale orange with spots of ground-colour, its inner edge not entering cell, straight, and at right angles to costa, its outer edge rounded but invaded by ground-colour.

Head and thorax smoky grey, antennæ yellowish brown;

legs and abdomen greyish brown.

Hab. Arfak Mtns., Angi Lakes, 6000 feet, Jan.-Feb. 1 ♀.

Paralcis lituata, sp. n. (Pl. III. fig. 6.)

This species is strongly reminiscent of Paradromulia

ambigua, Warr.

J. Upperside.—Fore wing brownish ochreous much irrorated with black. Two black basal lines; a dark discal area, its upper part bounded by a black post-discal line; post-discal line at right angles to costa and curving inwardly below vein 4, thence straight from vein 2 to inner margin; upper part of post-discal line separated from a dark distal area by a costal stripe of ground-colour which is joined to a similar stripe filling outer two-thirds of cellule 3; a thick distal line of ground-colour nearly parallel with outer margin, and shortly hooked anteriorly and proximally contingent here with a small apical patch of ground-colour; a

thin white subterminal line, very irregular and very faint in its middle part; a black marginal line. Hind wing greywhite, much irrorated with brownish ochreous except in costal area. A dark basal line; a discocellular spot; two crenulate post-discal lines, the outer more faintly marked; a thick subterminal line bordering a darker marginal area; a black marginal line.

Underside brownish ochreous with markings on upperside

showing through.

Antennæ, head, thorax, and abdomen brownish ochreous; legs ochreous banded with brown.

Length of fore wing 21 mm.

Hab. Angi Lakes, Arfak Mtns., 6000 feet, Jan.-Feb. 2 & &.

Craspedosis prouti, sp. n. (Pl. III. fig. 3.)

 \mathfrak{P} . Wings above and below plumbagineous. Fore wing with a pale orange discal band from vein 10 to vein 1 a or before it, narrowing posteriorly and variable in width; it enters cell and inner edge is oblique, outer edge angled at vein 4.

Thorax blue-black; head, antennæ, abdomen, whole

underside, and legs grey.

Length of fore wing 23 mm.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. 2 9 9.

Craspedosis scordylodes, sp. n. (Pl. IV. fig. 18.)

Q. Upperside.—Fore wing black, with a bronzy sheen. A pale yellow discal band from the costa to close to outer margin below vein 2, broader anteriorly above vein 4, and passing through end of cell. Hind wing black with a bronzy sheen at inner margin.

Underside dead black. Fore wing with yellow band as

above.

Antennæ black; head, thorax, abdomen, and legs dark grey.

Length of fore wing 18 mm.

Hab. Angi Lakes, Arfak Mtns., 6000 feet, March. One specimen.

Xanthomima plumbeomargo, J. & T.

X. plumbeomargo, Joicey & Talbot, Trans. Ent. Soc. Lond. 1916 (Aug.), p. 82 (Schouten Islands).

Mr. L. B. Prout informs us that this species must sink to

Xanthonima (Eusemia) melanura, Kirsch. Mitth. Zool. Mus. Dresden, ii. pp. 130-131, pl. vii. fig. 3 (1877) (Kordo, Schouten Is.).

Eucharidema arfaka, sp. n. (Pl. III. fig. 1.)

Similar to aroensis, Roth.*, and enanthes, Prout †. Agrees with aroensis in the white band of the hind wing, which is absent in enanthes. Differs from enanthes on the fore wing in the well-marked posterior fork of the subterminal line, in the stripe in cellule 3 being perceptibly forked at its distal end, and the orange patch below being reduced proximally. It resembles the differently looking labyrinthodes, Prout ‡, in the fork of the subterminal line, and the reduced orange

patch on the underside.

3 9. Upperside. Fore wing with ground-colour black strongly irrorated with chocolate-brown, which is less at base and outer margin. A distinct thin basal line of chocolate-brown, a subterminal irregular line which runs parallel to margin from costa near apex to vein 4, then curves inwards and is oblique to inner margin; it is joined to another line at the middle of vein 3, this line going to the tornus, and it is sometimes connected with a curved mark outside it in cellule 2. A white postcellular bar or line, reduced to a pale thin line in two specimens, runs just beyond cell from centre to vein 4 and is slightly curved. The whole of cellule 3 is filled in with chocolate-colour, and this extends more or less definitely as a bar across end of cell. There is a small triangular patch of chocolate-colour on margin below apex, and this usually cuts off a black apical patch. Hind wing plumbagineous with a narrow white postcellular band from costa to vein 4; it narrows posteriorly and is sometimes obsolescent to inner margin.

Underside plumbagineous. Fore wing darker in distal half. A broad orange-yellow subapical band from costa to vein 2, slightly invading cell, widest in cellule 3, outer edge more irregular than the inner. Hind wing without

markings.

Head, thorax, and abdomen smoky brown above, paler below; antennæ pale brown; legs grey.

Length of fore wing 24 mm.

^{*} Boarmia aroensis, Roths. Nov. Zool. xi. p. 322, pl. iii. fig. 29 (1904). † Eucharidema euanthes, Prout, Nov. Zool. xxiii. p. 67 (1916) (Mt. Goliath). † E. labyrinthodes, Prout, l. c. p. 68 (Mt. Goliath).

Hab. Arfak Mtns., Angi Lakes, 6000 feet, Jan.-March. 8 さる、2 ♀ ♀.

E. evanthes, Prout, and E. labyrinthodes, Prout, were taken at the same locality.

Uraniidæ.

Cyphura urapteroides, sp. n. (Pl. III. fig. 16.)

Q. Upperside.—Fore wing with distal half dark grey; proximal half white, traversed by a dark grey median band, leaving a narrower white outer band; median band broader anteriorly with an incurved distal edge and nearly straight inner edge; costa speckled with black except at apex. Hind wing white with a broad terminal band of dark grey, narrowing to inner angle; margin bordered with white ending in a fine line at apex and towards inner angle, but in cellule 3 very broad and less so in 2, bearing in each cellule a rounded black marginal spot; a faint greyish patch above the inner angle, anteriorly diffused but distally defined.

Underside.—Fore wing with blackish-grey distal half. An anterior basal triangular patch of dark grey which fills the cell and the base of cellule 2, its outer edge continued as a faint line to the inner margin. Hind wing with a darker and broader terminal band; margin thinly edged with white except between veins 4 and 6, where it is broadly edged; a faint greyish inner marginal patch as above.

Antennæ grey-brown, the shaft dotted with white on upper side; palpi black, white on the outside; head black, frons edged with white; thorax white; abdomen grey-white; legs grey-white, fore- and mid-tibiæ dark grey.

Length of fore wing 18-21 mm.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. 2 ♀ ♀.

Lasiocampidæ.

Trabala viridana, sp. n. (Pl. III. fig. 11.)

Allied to irrorata, Moore*, from Java, Malay Pen., and Borneo.

Mr. H. T. G. Watkins has kindly allowed us to examine a d of irrorata in his collection from Malacca. It is larger than

^{*} Trabala irrorata, Moore, Trans. Ent. Soc. Lond. (1884), p. 375. Q (Java).

viridana, the fore wing measuring 22 mm. The outer margin of the fore wing is not crenulate; the discal line is straight; the abdomen is pale buff; the antennæ darker. Species of this genus vary in colour and in development of wing-

markings.

3. Upperside dark green. Fore wing with a thin curved brownish basal line; a brown discocellular dot; a thin and strongly waved brownish discal line from about middle of costa, curved outwardly to vein 7, thence obliquely inwards to inner margin proximally of its middle; a brown post-discal line placed as in vishu, but more connected. Hind wing with a curved discal line and a post-discal zigzag line as on fore wing; inner margin grey-white; cilia ochreous, edged with brown outwardly. Both wings with fringes crenulate.

Head and palpi greenish yellow; antennæ ochreous; thorax green as wings; abdomen grey-white; pectus yellowish green; legs ochreous.

Length of fore wing 18 mm.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. One specimen.

Taragama melanospilotus, sp. n. (Pl. II. fig. 7.)

Near purpureocastanea, Roths.*, but chiefly distinguished by the black area of the hind wing and black upper surface of abdomen.

3. Upperside.—Forewing chestnut-brown; a black but indistinct basal and antemedian line, directed distad; a dark post-discal line, directed proximally; an outer post-discal line, slightly angled at 6; a subterminal series of small black spots dusted with grey scaling. Hind wing with posterior area to vein 6 black, the remainder chestnut-brown; two black discal lines visible in the brown area. Fringes very short and white.

Underside.—Fore wing darker brown with post-discal lines as above. Hind wing as above; some grey scaling on the

costal edge.

Antennæ sooty grey; palpi, head, and thorax chestnutbrown; abdomen above brownish black, below pale reddish ochreous; pectus and femora ochreous; tibiæ and tarsi chestnut-brown, the latter with grey scaling.

Length of fore wing 29-32 mm.

Hab. Wandammen Mtns., 6000 feet, Nov. 233.

* Taragama purpureocastanea, Rothschild, Lep. B. O. U. & Woll. Exp. pp. 105–106, pl. 2. fig. 57 (1915) (Utakwa River).

Taragama castanea, sp. n. (Pl. II. fig. 9.)

3. Upperside dark chestnut-brown. Fore wing with a dark but indistinct basal line and a similar antemedian line; a distinct post-discal line, outwardly curved to vein 5 and then curved inwards, distally edged with pale ochreous below vein 5; a subterminal row of small black spots between the veins, each spot edged proximally with ochreous; margin washed with ochreous near apex and the rest scaled with greyish ochreous. Hind wing with a black, indistinct, curved discal line; fringe white.

Underside same colour as above. Fore wing with a postdiscal line more heavily marked. Hind wing with discal

line as above and trace of a post-discal line.

Anteunæ ochreous; palpi, head, thorax, abdomen, and legs dark chestnut-brown: eves densely hairy.

Length of fore wing 25 mm.

Hab. Arfak Mtns., Angi Lakes, 6000 feet, Jan.-Feb. 1 ♂.

We place this distinct species, provisionally, in *Taragama*, but it differs from typical forms of that genus in the hairy eyes and the smaller palpi.

Opsirhina melanacra, sp. n. (Pl. II. fig. 8.) 1

3. Upperside reddish brown. Fore wing with apical area dusted with greyish black; a straight and oblique blackish post-discal line. Hind wing with some greyish-

black dusting along the outer margin.

Underside reddish brown. Fore wing as above, but with a trace of a subterminal blackish line; some grey dusting at outer angle. Hind wing with a darker brown post-discal line; distal margin dusted with grey, formed by an admixture of whitish hairs.

Autennæ black; palpi, head, and thorax rufous; abdomen

blackish above, rufous below; legs rufous. Length of fore wing 15 mm.

Hab. Wandammen Mtns., 3000-4000 fect, Nov. 1 3.

Drepanidæ.

Holoreta leucospila, sp. n. (Pl. III. fig. 12.)

Allied to *Holoreta cervina*, Warr.* Differs in colour of * *Holoreta cervina*, Warren, Nov. Zool. xiv. p. 97 (1907) (Brit. N. Guinea).

upperside, in the fore wing having a rounded discocellular

spot, and oblique line being near the margin.

3. Upperside vinaceous with a faint white suffusion, and faintly dotted with black. Fore wing with a rounded discocellular spot, proximally outlined with white, the spot distinct on account of absence of white scaling; oblique thin black line, distally edged with white, from below apex to inner margin at middle; area distally of oblique line more strongly irrorated with black, especially at apical margin; a rounded cream-coloured spot on inner margin between tornus and post-discal line. Hind wing with a faint yellowish basal line and an indistinct yellowish irregular post-discal line.

Underside.—Fore wing paler than above, yellowish at inner margin and on costa near apex. Hind wing yellowish white

with faint vinaceous irrorations.

Antennæ yellowish brown; head and palpi crimson; vertex yellowish brown; tegulæ vinaceous mixed with white; patagia and abdomen vinaceous; abdomen laterally yellowish brown; legs reddish brown with yellowish-brown hair.

Length of fore wing 20 mm.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. One specimen.

Holoreta leucospila f. flavobscura, forma n. (Pl. III. fig. 13.)

3. Upperside with yellow ground-colour much irrorated and obscured by blackish brown. The hind wing is darkened between the basal and post-discal lines; below this there is a dark suffusion reaching vein 5, and some dark apical markings.

Underside pale yellow, much speckled with black and brown, less so on the hind wing. Post-discal line distinct

on both wings.

One specimen from Wandammen Mtns.

Hepialidæ.

The following four forms of *Porina* appear to be undescribed. We are uncertain of their specific distinctness in the absence of more material from New Guinea for comparison.

Porina nigripuncta, sp. n. (Pl. II. fig. 10.)

3. Upperside of fore wing with ochreous-grey ground-

colour. A black spot in upper part of cell near base, a subbasal mark in 1 b, and a dot above it in 1 c, an irregular discal line of black spots, the upper one in cellule 8 near base of cellule, the second in 7 more proximal and longer, the third more proximal, on the discocellular and obliquely placed, the fourth in 4, the fifth and sixth conjoined to form a large spot in 2 and 3; a little proximal of the last spot a thin line runs from vein 2 to the inner margin; distal half of wing paler with some dark shading in places; a postmedian series of spots and streaks, the three anterior in 7-9 are dark and thin transverse streaks, the middle three in 4-6 are small rounded grev-white spots with a dark edging, the posterior ones are minute, being two dots in 3, a streak in 2, and a dot on the margin in 1 c; a second similar row of spots of which only the one in 6 has a pale centre; a third row of four spots in 5-7, there being two minute ones with pale centres in 7, the two below being heavily marked; a fourth row of indistinct spots, of which two minute ones with pale centres in 8 and a heavily marked one in 7, are the most conspicuous; traces of two other rows of markings in the subapical region; distal half of wing paler than proximal half; lower distal part below vein 7 paler than the anterior area. Hind wing ochreous; an indistinct series of subterminal dots between the veius.

Underside ochreous; fore wing markings showing

through.

Autennæ pale ochreous; palpi brownish ochreous; head and thorax brownish ochreous above; legs ochreous-grey; underside of thorax and abdomen pale ochreous.

Length of fore wing 36 mm.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. 1 3.

Porina nigricosta, sp. n. (Pl. II. fig. 11.)

3. Upperside of fore wing fuscous, costa black; basal area of cell yellowish brown and outwardly diffused; some terminal yellowish dusting on anterior half of outer margin; rows of indistinct dark markings and dots with pale centres, as in the preceding species. Hind wing ochreous, the lower median area darkened.

Underside ochreous.

Antennæ pale ochreous; head and palpi black; thorax dark brown; pectus greyish ochreous; abdomen ochreous, darker below; legs dark brown.

Length of fore wing 33 mm.

Hab. Wandammen Mts., 3000-4000 feet, Nov. 1 d.

Porina subochracea, sp. n. (Pl. II. fig. 12.)

3. Upperside of fore wing with ochreous-grey ground-colour; basal area tinged with reddish brown, mostly obscured in the type by pale ochreous; costa dark brown to within a fourth from the apex; a broad median longitudinal stripe of pale ochreous from the base to outer margin; this stripe is absent in the co-types, and one of these possesses in its place a narrow blackish stripe; a basal, median, three postmedian, and a subterminal row of pale ochreous spots with blackish centres; the median spot in 1 b is larger than the others and shows a larger black centre; the second postmedian series consists of 4 small spots in 3-6, the subterminal series is minute, and there is a row of indistinct marginal dots; in two specimens the spots are more or less obsolete. Hind wing pinkish ochraceous.

Underside pale ochreous; spots on fore wing indistinctly

showing through.

Antennæ pale ochreous; head and palpi brownish ochreous; thorax brownish ochreous; abdomen and pectus pale ochreous; posterior legs pale ochreous, fore- and midtibiæ and tarsi brownish ochreous, fore- and mid-femora pale ochreous.

Length of fore wing 29 mm.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. 4 & &.

Porina argentipuncta, sp. n. (Pl. 11. fig. 13.)

3. Upperside of fore wing ochraceous and shaded with brown, two specimens being greyish white in the inferior basal and postmedian areas. Costa dark brown. Some silvery spots variable in size; a small one in cell near base, a large quadrate spot in upper angle of cell, and a small one above it; four smaller postcellular spots in 3-6, the one in 5 placed longitudinally; a rounded median spot in 1 b; three post-discal rows of minute dark spots and dots, with pale edging; the distal ones more or less silvery; a marginal series of dark dots. Hind wing pinkish ochreous.

Underside pale ochreous, the lighter spots of fore wing

showing through.

Antennæ pale ochreous; head and palpi brownish ochreous; thorax and abdomen ochreous; legs brownish ochreous.

Length of fore wing 27 mm.

Hab. Wandammen Mtns., 3000-4000 feet, Nov. 3 & 3.

EXPLANATION OF THE PLATES.

PLATE I.

Fig. 1. Asura wandammenensæ, Joicey & Talbot, Ann. & Mag. Nat. Hist. ser. 8, vol. xvii. p. 83 (1916) (Wandammen Mtns.).

Fig. 2. Diacrisia ochrifrons, p. 50. Fig. 3. Athyrma spilota, p. 51. Fig. 4. Zethes ochreemarginata, p.

Fig. 4. Zethes ochreomarginata, p. 53. Fig. 5. Mecodina polyscia, p. 52. Fig. 6. Pseudaglossa birapillata, p. 53.

Fig. 7. Hypena montana. p. 54. Fig. 8. Euproctis chlorospila, p. 55.

Fig. 9. — semirufa, p. 56. Fig. 10. — acrita, p. 55. Fig. 11. — chlora, p. 56. Fig. 12. Imaus nepha, p. 57.

Fig. 13. —— basistrigā, p. 58. Fig. 14. Dasychiroides obso'eta, B.-Bkr., Q, p. 58.

Fig. 15. Stauropus chloriolus, p. 59. Fig. 16. — melanogrumma, p. 60.

PLATE II.

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Fig. 5. Gargetta melanosticta, p. 61.
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PLATE III.

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Fig. 1. Hypodoxa pallida, p. 66.

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Fig. 7. Pseudomiza opaca, p. 71. Fig. 8. Cleora discipuncta, p. 74.

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Fig. 11. Crasilogia dispar fulvitineta, p. 68.

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Fig. 15. Sauvis definita, p. 68.

Fig. 16. Cleora flaccida constricta, p. 74. Fig. 17. Paralcis costimacula, p. 76.

Fig. 18. Craspedosis scordylodes, p. 78.

V.—New Races and Aberrations of Heliconius. By J. J. Joicey, F.E.S., and W. J. Kaye, F.E.S.

[Plates V. & VI.]

THE races and aberrations here described are all in the collection of Mr. J. J. Joicey at Witley. It will be noted that we have kept cydno as a species, and not treated it as a form of melpomene as Dr. Eltringham has maintained in his valuable paper in the Trans. Ent. Soc. 1916, pp. 101-148. While we think his contention is possibly sound, we prefer for the present to keep cydno as a separate species, on account of the constant red markings on the underside. If ultimately cydno should be definitely proved to be conspecific with melpomene, one would expect this red marking on the underside to occasionally occur in melpomene races and forms in other geographical areas outside Colombia and adjacent portions of Venezuela. Southwards these forms are unknown; only to the north, in Central America, are they further to be met with. The two forms eratophylla and melpophylla—the one a subspecies of erato, the other a subspecies of melpomene -are of more than ordinary interest in the extraordinarily close resemblance they bear to one another, although of a complicated pattern. It is very curious to note that it is the yellow transverse band that has displaced a portion of the streaking in the erato form, but has filled up a vacant space